YUM

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# GEOGRAPHIC MAGAZINE

VOLUME II, 1890

WASHINGTON

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1891

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1890

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# THE

# NATIONAL GEOGRAPHIC MAGAZINE.

Vol. II. 1890. No. 5.

## ANNOUNCEMEMT.

The NATIONAL GEOGRAPHIC SOCIETY was organized in January, 1888, "to increase and diffuse geographic knowledge." It is incorporated under the laws of the District of Columbia, and has at present an active membership of about four hundred.

The publication of a magazine was early determined upon as one of the means of increasing and diffusing geographic knowledge; and two volumes of *The National Geographic Magazine* have been published in the form of a quarterly journal.

During the past two years it has been found that the form of publication adopted at the outset meets but imperfectly the needs of the Society: in the first place, since the season of active work in the Society includes the winter months only, there was an excess of material for the two earlier numbers and a dearth of material for the two later numbers of the volume; and in the second place, the necessity for holding articles until sufficient material for a number was received sometimes led to delay in publishing interesting and important matter. Accordingly it has been decided to discontinue the quarterly form and to publish the *Magazine* in the form of a series of brochures, each issued promptly as possible after reception of the material. The details of this modified form of publication are set forth elsewhere in this number of the *Magazine*.

While the *National Geographic Magazine* is edited by and constitutes the organ of the NATIONAL GEOGRAPHIC SOCIETY, it is not limited to this function ; and, as was announced in the first number of the journal, "its pages will be open to all persons interested in geography in the hope that it may become a channel of intercommunication, stimulate geographic investigation, and prove an acceptable medium for the publication of results."

With the adoption of the modified form of the journal the publication year was changed from one determined by the working season of the SOCIETY to the calendar year ; and it is to cover a hiatus in the SOCIETY's records growing out of this change that this fifth number of Volume II is issued.

The National Capital seems to be a natural and appropriate place for an association of national character, and the aim of the founders has been therefore to form a continental rather than a local Society. That this aim has measurably succeeded is indicated by the fact that although the NATIONAL GEOGRAPHIC SOCIETY is only three years old there are 57 non-resident members, distributed over 27 states and territories.

One of the means adopted by the NATIONAL GEOGRAPHIC SOCIETY for increasing geographic knowledge has been that of exploration. In the spring of 1890 an expedition was sent out by the Society to explore and survey the Mt. St. Elias alps of Alaska. The results of the expedition include (1) new determinations of altitude and geographic position for Mt. St. Elias and neighboring peaks ; (2) a topographic map of a considerable part of the Mt. St. Elias range with its southwestern foothills and the slopes thence to the shores of the Pacific ; (3) an investigation of the glaciers of this alpine region ; (4) researches into the geology of the region ; and (5) a study of the range and its climatal and other conditions so complete as to prepare the way for detailed surveys of the entire region.

A report on the Mt. St. Elias expedition, comprising about 150 pages of letter-press with 20 plates and a number of other illustrations, has just been sent to press as a part of Volume III of the *National Geographic Magazine.*

As another means of carrying out the purposes of the SOCIETY, regular fortnightly meetings are held for presenting scientific and

popular communications on geographic subjects, some of which are published in the *National Geographic Magazine*. The Society also provides for the delivery of public lectures in Washington upon explorations in little-known countries and upon other geographic subjects. Within a few months lectures have been delivered under the auspices of the Society by eminent explorers or students on the following subjects:

The Explorer in Egypt;
Buried Cities of Ancient Egypt;
Life among the Australian Cannibals;
A Journey through China, Mongolia and Thibet;
Korea and the Koreans;
Results of the Mt. St. Elias Exploring Expedition.

The SOCIETY has in preparation a physical atlas of the United States.

There is no geographic or number limitation to membership in the SOCIETY. The *National Geographic Magazine* is sent free to members.

Correspondence with the SOCIETY should be addressed to Mr. Marcus Baker, Secretary, No. 1330 F Street, Washington, D. C.

# PROCEEDINGS

OF THE

# NATIONAL GEOGRAPHIC SOCIETY.

## ABSTRACT OF MINUTES.

*March 21, 1890.* *37th meeting.*

Meeting held in Assembly Hall of the Cosmos Club. President Hubbard in the chair. Attendance, 50.

Article V, paragraph one, of the By-laws was amended so as to read "The annual dues of active members shall be five dollars and of corresponding members two dollars, payable during the month of January, or, in the case of new members, within thirty days after election."

A discussion was then had on the subject of Geographic Nomenclature, participated in by Messrs. H. G. Ogden, Gustave Herrle, Marcus Baker and A. H. Thompson. *Published in The National Geographic Magazine. 8°. Washington, D. C. August, 1890. Vol. 2, no. 4, pp. 261–278.*

Mr. L. R. Klemm made some remarks on "A new method of developing geographic facts in teaching."

*April 4, 1890.* *38th meeting.*

Meeting held in Assembly Hall of the Cosmos Club. Vice-President Hayden in the chair. Attendance, 25.

Mr. Robert Stein read a paper on "Turkish rule in Armenia," which was discussed by Mr. H. Garabed of Sis, Cilicia, Asia Minor, and by Mr. Kenaston. *Not published.*

*April 11, 1890.* *Special meeting.*

Meeting held in the Lecture Hall of the National Museum. Vice-President Hayden in the chair. Attendance, 850.

Ensign J. B. Bernadou, U. S. N., addressed the Society on "Korea and the Koreans." His lecture was illustrated by lantern slides. *Revised and published in The National Geographic Magazine. 8°. Washington D. C. August, 1890. Vol. 2, no. 4, pp. 231–242.*

*April 18, 1890.* *39th meeting.*

Meeting held in the Assembly Hall of the Cosmos Club. Vice-President Hayden in the chair. Attendance, 90.

Ensign Hugh Rodman, U. S. N., read a paper on "Icebergs and field ice in the North Atlantic." The communication was illustrated by lantern slides. *Published by the U. S. Hydrographic Office with this title—No. 93. Report of ice and ice movements in the North Atlantic Ocean, by Ensign Hugh Rodman, U. S. N., under the direction of Capt. Henry F. Picking, U. S. N., Hydrographer. 8°. Washington, government printing office. 1890. 26 pp. 1 folder, 4 maps.*

The paper was briefly discussed by Mr. Hayden.

*May 2, 1890.* *40th meeting.*

Meeting held in the Lecture Hall of the National Museum. Vice-President Ogden in the chair. Attendance, 450.

Mr. W. W. Rockhill read a paper giving an account of "A journey through Mongolia, China and Thibet," made by him in 1888–1889. The communication was illustrated by lantern slides. The material embodied in this paper with much more on the same subject has been *published in The Century. 8°. New York, 1890, Nov. Vol. 41, no. 1, pp. 1–17; Dec. no. 2, pp. 250–263; Jan. 1891, no. 3, pp. 350–361; Feb. no. 4, pp. 599–606; Mar. no. 5, pp. 720–730.*

*May 7, 1890.* *Special meeting.*

Meeting held in the Assembly Hall of the Cosmos Club. President Hubbard in the chair. Attendance, 50.

This was a special meeting called to consider the following propositions.

*First:* Methods of increasing membership.

*Second:* The employment of a salaried assistant secretary.

*Third:* The establishment of a monthly periodical.

*Fourth:* The formation of sections, or auxiliary societies, throughout the country.

Messrs. Baker, Blodgett, Gilbert, Goodfellow, Hayden, Hornaday, J. B. Johnson, W. D. Johnson, Kenaston, McGee, Ogden, Gilbert Thompson, Weed and Welling took part in the discussion of these propositions. There was unanimity of sentiment as to the desirability of increasing the membership and employing a salaried assistant secretary and editor.

With regard to the third and fourth propositions sentiment was divided.

Action was taken by the adoption of the following :—

*Resolved:* That the members of the Society pledge themselves severally to use their best endeavors to obtain two new members each for the Society, within the next ten days and report their names to the Secretary of the Society.

*Resolved:* That a committee of five, of which the President shall be chairman, be appointed by the President for the purpose of devising plans and raising means for carrying out the purposes for which the Society is organized.

The President named as such committee,

Messrs. Gardiner G. Hubbard, *Chairman*,
Marcus Baker,
Henry Gannett,
A. W. Greely,
Everett Hayden.

*May 16, 1890.* *41st meeting.*

Meeting held in the Assembly Hall of the Cosmos Club. Vice-President Hayden in the chair. Attendance, 50.

Mr. Josiah Pierce, Jr., read a paper on "The Ordnance Survey of Great Britain—its history and object," which was illustrated by numerous maps and drawings. The paper was discussed by Messrs. Baker, Bartle, Gannett, Gilbert, W. D. Johnson, Littlehales, Gilbert Thompson and the author. *Published in The National Geographic Magazine. 8°. Washington, D. C. August, 1890. Vol. 2, no. 4, pp. 243–260.*

—— Summer Vacation. ——

*November 26, 1890.* *Special meeting.*

Meeting held in Lincoln Music Hall. Hon. W. T. Harris presided. Attendance, 800.

Mr. I. C. Russell delivered an address on the results of the exploration made by him under the auspices of the National Geographic Society, last summer, in the vicinity of Mt. St. Elias, Alaska. The address was illustrated by wall maps and lantern slides. A full report of this exploration *will be published in The National Geographic Magazine. An article on the subject is also expected to appear in The Century, April, 1890.*

*November 28, 1890.* *42d meeting.*

Meeting held in the Assembly Hall of the Cosmos Club. President Hubbard in the chair. Attendance, 90.

The chair announced the election to membership since the meeting of May 23, 1890, of 148 new members.

Mr. Mark B. Kerr read a paper on the results of his surveys last summer in company with Mr. I. C. Russell in the vicinity of Mt. St. Elias, Alaska. The paper was discussed by Messrs. Abbe, Baker, Dall, Gannett, Gilbert, Ogden and Woodward. *Revised and published in Scribner's Magazine. 8°. New York, 1891, March, Vol. 9, no. 3, pp. 361–372.*

Mr. I. C. Russell exhibited a painting of Taku Glacier, Alaska, made by Mr. Keith, of San Francisco, and made a few explanatory remarks thereon.

*December 12, 1890.* *43d meeting.*

Meeting held in the Lecture Hall of the Columbian University. Vice-President Hayden in the chair. Attendance, 200.

Ensign J. M. Ellicott, U. S. N., delivered an address, illustrated by lantern slides, on "Surveys executed by the U. S. S. Ranger in Lower California." *Not yet published.*

*December 19, 1890.* *Special meeting.*

Meeting held in the Lecture Hall of the Columbian University. Vice-President Ogden in the chair. Attendance, 100.

The President, Gardiner G. Hubbard, delivered his annual address, on the subject "South America." *Published in The National Geographic Magazine. 8°. Washington, D. C. March, 1891. Vol. 3, pp. 1–30.*

*December 26, 1890.* *44th (3d annual) meeting.*

Meeting held in the Assembly Hall of the Cosmos Club.

The annual report of the Secretaries was presented. *Printed on pages 296–298.*

The annual report of the Treasurer was presented and referred to an auditing committee consisting of Messrs. P. H. Christie, R. D. Cummin and S. A. Aplin, Jr. *Printed on pages 299, 300.*

The annual election of officers, for 1891, was then held with the following result:

*President*—Gardiner G. Hubbard.
*Vice-Presidents*—H. G. Ogden [land];
Everett Hayden [sea];
A. W. Greely [air];
C. Hart Merriam [life];
Henry Gannett [art].
*Treasurer*—Charles J. Bell.
*Recording Secretary*—Marcus Baker.
*Corresponding Secretary*—C. A. Kenaston.
*Managers*—Rogers Birnie, Jr.,
G. K. Gilbert,
G. Brown Goode,
W. D. Johnson,
W J McGee,
T. C. Mendenhall,
W. B. Powell,
B. H. Warder.

*January 9, 1891.* *45th meeting.*

Meeting held in the Assembly Hall of the Cosmos Club. President Hubbard in the chair. Attendance, 30.

Report of the auditing committee appointed at the last meeting was presented and adopted. *Printed on page 301.*

Article IV of the By-laws was amended by striking out the following clause: "The Vice-Presidents, together with the two Secretaries, shall constitute a committee of the Board of Managers on Communications and Publications."

Vice-President Hayden, Department of the Sea, and Vice-President Merriam, Department of Life, presented their annual reports. *Not yet published.*

*January 23, 1891.* *46th meeting.*

Meeting held in the Assembly Hall of the Cosmos Club. President Hubbard in the chair. Attendance, 35.

Vice-President Greely, Department of the Air, and Vice-President Ogden, Department of the Land, presented their annual reports. *Not yet published.*

*February 6, 1891.* *47th meeting.*

Meeting held in the Assembly Hall of the Cosmos Club. President Hubbard in the chair. Attendance, 50.

The meeting was devoted to an account of the U. S. S. Pensacola expedition to the west coast of Africa.

Mr. Cleveland Abbe described the cruise in general terms and gave some account of the geodetic surveys executed in and the climate of South Africa.

Mr. Heli Chattelaine, of Switzerland, read a paper on the Dialects and Folk-Lore of the Portugese portion of West Africa.

Mr. Frank H. Bigelow read a paper on the island of Ascension.

*February 13, 1891.* *Special meeting.*

Meeting held in the Assembly Hall of the Cosmos Club. Vice-President Greely in the chair. Attendance, 225.

Hon. Geo. B. Loring, Ex-U. S. Minister to Portugal, delivered an address upon the "Kingdom of Portugal." *Not published.*

*February 20, 1891.* *48th meeting.*

Meeting held in the Assembly Hall of the Cosmos Club. Vice-President Hayden in the chair. Attendance, 40.

Mr. F. H. Newell read a paper on "Natural Gas and Oil in the Eastern United States." This paper was discussed by Mr. W J McGee.

Mr. C. D. Walcott read a paper on "The North American Continent during the Cambrian." This paper was discussed by Messrs. Gilbert and McGee. It is planned to publish the paper in *The National Geographic Magazine, Vol. 3.*

*February 27, 1891.* *Special meeting.*

Meeting held in the Assembly Hall of the Cosmos Club. Vice-President Greely in the chair. Attendance, 225.

Major C. E. Dutton, U. S. A. delivered an address upon "The Hawaiian Islands: their scenery, volcanoes, people, and politics, with a few words about the reciprocity treaty with the United States."

Foregoing abstract prepared by the secretaries March 2, 1891.

# NATIONAL GEOGRAPHIC SOCIETY.

## THIRD ANNUAL REPORT OF THE SECRETARIES.

PRESENTED TO THE SOCIETY, DECEMBER 26, 1890.

*Membership.*—The Society was organized in January, 1888, with a total membership of 165.

At the close of its first year, in December, 1888, the membership was 209. At the close of the second year, in December, 1889, the membership was 228; and the present membership is 392.*

Since the last annual meeting the membership has been increased by the election of 190 new members. It has been decreased by the resignation of 10 members, by the death of 1 member (Capt. C. O. Boutelle) and by the dropping of 15 members for non-payment of dues. The net increase has thus been 164, and the present total membership is 392 as above stated.

This membership is classified as follows:

| | |
|---|---|
| Active members | 331 |
| Corresponding members | 57 |
| Life members | 4 |
| Total number of members | 392 |

At the beginning of the year, corresponding members paid no dues. On March 20 of this year, however, the By-Laws were so amended as to require these members to pay annual dues of $2.00, such payment entitling them to the publications of the Society.

*Meetings.*—The Society has held 22 meetings during the year, of which, 13 were regular meetings for the reading and discussion of papers, 4 were public lectures at which an admission fee

* The membership has since increased to 399, as shown by the summary on p. 334.

was charged, 1 was a field meeting at the Great Falls of the Potomac on May 21, 1 was a special meeting for considering ways and means for increasing the Society's usefulness, 1 was the meeting for presentation of the annual address of the President for 1889 (delayed by reason of absence of the President from the city), 1 was the meeting for the presentation of the President's address for 1890, and 1 the annual meeting for the election of officers and transaction of business.

At the regular meetings for the reading and discussion of papers, the average attendance was 170, the highest being 850 and the lowest 25.

The Board of Managers have held 23 meetings for transacting the business of the Society, of which 13 were regular and 10 were special meetings. The highest attendance of the 17 members composing the Board was 13, and on several occasions there has been no quorum.

*Changes in the Board.*—On November 5, the Recording Secretary, Mr. Henry Gannett, resigned, and the Board of Managers filled the vacancy by electing Mr. Marcus Baker in his place. The Board then elected Mr. Gannett as one of the Managers. On December 9, Mr. O. H. Tittmann resigned the office of Corresponding Secretary, and Dr. J. C. Welling resigned from the Board of Managers. The vacancies thus created have not been filled.

*Explorations.*—In the month of May the Board of Managers decided to send a party to the vicinity of Mt. St. Elias, Alaska, for the purpose of making geographic and geologic exploration and survey. Funds for the purpose were obtained in part from the treasury of the Society, in part from private subscription and in part from the coöperation of the U. S. Geological Survey. Mr. I. C. Russell, Geologist of the U. S. Geological Survey, was placed in charge of the party and of geologic work, and Mr. Mark B. Kerr, Topographer, also of the U. S. Geological Survey, was sent in charge of the topographic work.

Through the kindly coöperation of the U. S. Navy Department and of the U. S. Revenue Marine, both of which furnished transportation, the party reached the field of work and was brought away at the close of their labors without mishap or loss of time. The party, consisting all told of nine persons, were enabled to spend about three months in exploration and survey of a most interesting and unknown region filled with gigantic moun-

tains smothered in glaciers. An area of several hundred square miles was mapped, mountain peaks climbed, heights measured, photographs made and numerous and interesting notes obtained. A final report of this, the Society's first venture in exploration, is now in preparation and its publication by the Society is expected in a short time.

*Publications.* — During the year the Society has published volume II of the National Geographic Magazine. This volume contains 285 pages, together with maps and illustrations, and was issued in four numbers, in April, May, July and August.

MARCUS BAKER,
C. A. KENASTON,
Secretaries.

## REPORT OF THE TREASURER.

PRESENTED TO THE SOCIETY, DECEMBER 26, 1890.

*To the President and Members of the National Geographic Society:*

I have the honor to submit herewith my annual report showing receipts and disbursements for the fiscal year ending December 26, 1890.

As will be seen by the report, the receipts from dues for 1890 amount to $1289^{00}$ against $865^{00}$ for 1889, showing an increase of $424^{00}$.

The assets of the Society consist of—

| | |
|---|---|
| Note of M. N. Thompson, secured by deed of trust, | $750 00 |
| Cash with Bell & Co. | 41 62 |
| Dues for 1890, unpaid | 260 00 |
| | $1051 62 |

Respectfully submitted,

C. J. BELL, Treasurer.

THE TREASURER in account with the NATIONAL GEOGRAPHIC SOCIETY.

| 1890. | | | | |
|---|---|---|---|---|
| | To balance on hand, December 26, 1889 | | | $63 82 |
| Dec. 26. | " cash rec'd for dues of 1889 | $95 00 | | |
| | " " " " 1890 | 1289 00 | | |
| | " " " " 1891 | 62 00 | | |
| | " " " " 1892 | 5 00 | | |
| | " " " Life Membership | 50 00 | | |
| | | | 1501 00 | |
| | " " from Lectures | | 834 38 | |
| | " " " Interest on Loan | | 45 00 | |
| | " " " Sales of Magazines | | 38 75 | |
| | | | | $2482 95 |
| 1890. | | | | |
| Dec. 26. | By cash paid for Magazine, No. 1, Vol. 2 | $148 10 | | |
| | " " " " 2 " | 215 80 | | |
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| | | | $693 26 | |
| | " " Expenses of Lectures | | 815 30 | |
| | " " Subscription to Alaska Explor. Fund | | 517 66 | |
| | " " Printing, Stationery, Postage, etc. | | 308 66 | |
| | " " Clerk hire | | 65 00 | |
| | " " Cosmos Club Rent | | 33 00 | |
| | " " Sundries | | 8 45 | |
| | " balance on hand (on deposit with Bell & Co.) | | 41 62 | |
| | | | | $2482 95 |

Washington, D. C., 26th December, 1890.

## REPORT OF THE AUDITING COMMITTEE.

PRESENTED TO THE SOCIETY JANUARY 9, 1891.

*To the President and Members of the National Geographic Society:—*

We, a committee appointed at the annual meeting of the Society to audit the accounts of the Treasurer for the year ending December 31, 1890, beg to submit the following report:

The statement of the receipts, consisting of dues from members, receipts from lectures, interest on loan and sale of magazines, has been examined and found correct.

The vouchers for expenditures and checks in payment therefor have been examined, compared and found correct.

We have examined the bank book, showing the account with Messrs. Bell & Co., and found the balance to be $41.62 as stated.

The Treasurer also showed us a note for $750 which is mentioned as part of the assets of the Society.

P. H. CHRISTIE,
ROBT. D. CUMMIN,
S. A. APLIN, JR.,
*Committee.*

## SUMMARY OF REPORTS ON THE MT. ST. ELIAS EXPEDITION.

During the year 1890, the National Geographic Society made its first venture in exploration. This venture consisted in raising funds, organizing and sending to the vicinity of Mt. St. Elias, Alaska, a small party in charge of Mr. I. C. Russell to make geographic and geologic studies. The following is a condensed account of the enterprise, taken largely from reports of committees and other records not otherwise published.

During the spring months of 1890, the Board of Managers of the National Geographic Society considered from time to time ways and means for carrying out the declared purpose of the Society "to increase and diffuse geographic knowledge." The advisability of undertaking some exploratory work was discussed. That geographic knowledge could be *diffused* by lectures and by publications was obvious. But to *increase* geographic knowledge other means were clearly necessary. Exploration seemed the most obvious mode for accomplishing this increase. What particular exploration should be undertaken was then considered. A proposition to aid in continuing the researches of Mr. W. W. Rockhill, in Thibet, was made but was given up on account of the expense, which seemed beyond the means of the Society. Later a proposition by Mr. W. D. Johnson that the Society should send a party to the vicinity of Mt. St. Elias, Alaska, was submitted and adopted provisionally, the proviso relating to success in securing the necessary funds. This proposition was submitted to the Board of Managers May 20, and adopted May 23, 1890.

Four days later, viz., on May 27, 1890, a largely attended special meeting of the Board went over the whole matter. It was submitted that the probable cost of the expedition would be about $3500; that of this sum about $2500 had already been paid or pledged and that 13 persons had signed a joint note for $1000 by which to secure the needful balance and insure the departure of the expedition. Furthermore it was submitted that the Secretary of the Navy had directed the U. S. S. Pinta to transport the party from Sitka to Yakutat Bay and return, and the Director of the U. S. Geological Survey had authorized the

detail of Mr. I. C. Russell, geologist, and Mr. Mark B. Kerr, topographer, for the scientific work of the expedition.

A long and earnest discussion was had on the advisability of starting the expedition out on this basis. The lateness of the season and the low condition of the funds were urged as reasons for delaying till next year. It was finally decided, however, by a vote of 7 to 5 to adopt the proposition now and start the expedition forthwith.

Thus, by the aid and coöperation of the U. S. Geological Survey and of the Secretary of the Navy, the expedition was organized. Mr. I. C. Russell, geologist, was placed in charge, and Mr. Mark B. Kerr was assigned as topographer of the party. The plan of work was to proceed to Yakutat Bay and to study and map as large an area in the vicinity of Mt. St. Elias as practicable. It was also planned to redetermine the height of the mountain, and, if practicable, to ascend it.

The party consisted all told of ten persons ; Messrs. Russell and Kerr before mentioned, Mr. E. S. Hosmer, a volunteer assistant from Washington, and seven camp hands, hired in Seattle, of whom James H. Christie was foreman. On June 17, they sailed on the steamer Queen for Sitka, where, on arriving, they found the U. S. S. Pinta in readiness to take them to Yakutat, in accordance with instructions previously received from the Secretary of the Navy. They were at once transferred with all their outfit from the Queen to the Pinta, and sailed for Yakutat Bay, arriving June 25, in fog and rain.

Three days later the party, with all stores and equipment, had been landed ; and bidding good-bye to the courteous officers of the Pinta, they entered upon the serious work of the season.

The area to be examined was found to consist of a majestic mountain range, trending southeast and northwest, in front of which was a broad, ice-covered plateau. The range is snow-clad down to a level of 1500 feet above the sea, and is filled with glaciers of vast magnitude. Excursions into this area and a study of its glacial and geological phenomena were at once begun. At the same time Mr. Kerr measured a base line and began the work of mapping the region. A system of triangulation starting from this measured base was carried on, the prominent peaks were located by intersection, and heights were determined by vertical angles. Sketches and photographs were taken from many points,

and before the season closed, sufficient material was gathered to make a fairly good map of an area of about 1000 square miles.

The topographic work having been well started and a base camp established, the party took up the line of march toward Mt. St. Elias. On the first of August they found themselves midway between Yakutat Bay and St. Elias, but still at the base of the mountains. Most of the way to this point the journey had been made over crevassed ice. The party continued to push on, and after twenty days of very severe labor above the snow line reached and camped at the base of St. Elias. From this camp, at an elevation of about 9,000 feet, the party started at 3 o'clock in the morning for the final climb to the summit of the mountain, but were beaten back by a prolonged and severe storm with heavy fall of snow. Two days later a second attempt was made, but another snow storm broke over the mountains as suddenly as the first. The deep snow accumulated by these two storms prevented all further progress, and the party reluctantly turned back. They continued to travel about in the region, while wending their way slowly back to Yakutat, gathering interesting and valuable geographic and geologic data. On the 20th of September they arrived at Yakutat Bay, having had almost continuous stormy weather since the attempted climb of the mountain. Two days after their arrival at Yakutat the U. S. Revenue Cutter Corwin, Capt. C. L. Hooper commanding, was seen steaming up the bay. Acting on his own judgment, and knowing that the explorers would fare badly if left at Yakutat until winter set in, Capt. Hooper had come from Sitka especially for the party, which was taken on board Sept. 24, and conveyed directly to Port Townsend, Washington, where it arrived October 2 and disbanded, Messrs. Russell and Kerr returning to Washington.

Various newspaper accounts of this expedition have been published, as well as articles in several magazines, notably in Scribner's, and the Century. The full official report with map and illustrations will be published hereafter in the *National Geographic Magazine.*

# BY-LAWS.

As adopted with Amendments up to January 9, 1891.

## Article I. Name.

The name of this Society is the "National Geographic Society."

## Article II. Object.

The object of this Society is the increase and diffusion of geographic knowledge.

## Article III. Membership.

The members of this Society shall be persons who are interested in geographic science. There may be three classes of members, active, corresponding, and honorary.

Active members only shall be members of the corporation; shall be entitled to vote and may hold office.

Persons residing at a distance from the District of Columbia may become corresponding members of the Society. They may attend its meetings, take part in its proceedings, and contribute to its publications.

Persons who have attained eminence by the promotion of geographic science may become honorary members.

Corresponding members may be transferred to active membership, and, conversely, active members may be transferred to corresponding membership by the Board of Managers.

The election of members shall be entrusted to the Board of Managers. Nominations for membership shall be signed by three active members of the Society; shall state the qualifications of the candidate; and shall be presented to the Recording Secretary. No nomination shall receive action by the Board of Managers until it has been before it at least two weeks, and no candidate shall be elected unless he receive at least nine affirmative votes.

## Article IV. Officers.

The Officers of the Society shall be a President, five Vice-Presidents, a Treasurer, a Recording Secretary, and a Corresponding Secretary.

The above mentioned officers, together with eight other members of the Society, known as Managers, shall constitute a Board of Managers. Officers and Managers shall be elected annually, by ballot, a majority of the votes cast being necessary to an election; they shall hold office until their successors are elected; and shall have power to fill vacancies occurring during the year.

The President, or, in his absence, one of the Vice-Presidents, shall preside at the meetings of the Society and of the Board of Managers; he shall, together with the Recording Secretary, sign all written contracts and obligations of the Society, and attest its corporate seal; he shall deliver an annual address to the Society.

Each Vice-President shall represent in the Society and in the Board of Managers a department of geographic science, as follows:

Geography of the Land.
Geography of the Sea.
Geography of the Air.
Geography of Life.
Geographic Art.

The Vice-Presidents shall foster their respective departments within the Society; they shall present annually to the Society summaries of the work done throughout the world in their several departments.

They shall be elected to their respective departments by the Society.

The Treasurer shall have charge of the funds of the Society, shall collect the dues, and shall disburse under the direction of the Board of Managers; he shall make an annual report; and his accounts shall be audited annually by a committee of the Society and at such other times as the Board of Managers may direct.

The Secretaries shall record the proceedings of the Society and of the Board of Managers; shall conduct the correspondence of the Society; and shall make an annual report.

The Board of Managers shall transact all the business of the Society, except such as may be presented at the annual meeting. It shall formulate rules for the conduct of its business. Nine members of the Board of Managers shall constitute a quorum.

### Article V. Dues.

The annual dues of active members shall be five dollars, and of corresponding members two dollars, payable during the month of January, or, in the case of new members, within thirty days after election.

The dues of members elected in November and December shall be credited to the succeeding year.

Annual dues may be commuted and life membership acquired by the payment of fifty dollars.

No member in arrears shall vote at the annual meeting, and the names of members two years in arrears shall be dropped from the roll of membership.

### Article VI. Meetings.

Regular meetings of the Society shall be held on alternate Fridays, from November until May, and excepting the annual meeting they shall be devoted to communications. The Board of Managers shall, however, have power to postpone or omit meetings, when deemed desirable. Special meetings may be called by the President.

The annual meeting for the election of officers shall be the last regular meeting in December.

The meeting preceding the annual meeting shall be devoted to the President's annual address.

The reports of the retiring Vice-Presidents shall be presented in January.

A quorum for the transaction of business shall consist of twenty-five active members.

### Article VII. Amendments.

These by-laws may be amended by a two-thirds vote of the members present at a regular meeting, provided that notice of the proposed amendment has been given in writing at a regular meeting at least four weeks previously.

## STANDING RULES OF THE BOARD OF MANAGERS.

ADOPTED JANUARY 16, 1891.

1.—The President, Vice-Presidents and Secretaries of the Society shall hold like offices in the Board of Managers.

2.—The President shall have power to call special meetings of the Board of Managers and to appoint special committees. He shall, also, at the beginning of each year appoint a Standing Committee, of three persons, on Communications; a Standing Committee, of three persons, on Publications; and three delegates, of which he shall be chairman, to serve on the Joint Commission.

3.—The Treasurer shall receive all dues and other income of the Society; shall keep its accounts; and shall disburse its funds under the direction of the Board of Managers.

4.—One of the Secretaries shall act as the Secretary of the Board and the other as Secretary of the Society; and both Secretaries shall be excused from serving on committees.

5.—The Committee on Communications shall receive and consider all communications, and propositions relating to communications, designed for delivery before the Society, and shall prepare programmes for all meetings.

6.—The Committee on Publications shall have charge of the publications of the Society.

7.—At the beginning of each year the Secretary shall submit an estimate of the revenues of the Society for the current year, whereupon, the Board shall make itemized appropriations for the different classes of regular expenditures. All expenditures not included in these regular allotments must be specially authorized by the Board. Charges against the regular allotments will be paid by the Treasurer upon the certification of the officer or chairman of the committee incurring the expenditures.

8.—The names of proposed members, recommended in conformity with Article III of the By-Laws, may be presented at any meeting of the Board of Managers and shall lie over at least two weeks before final action.

9.—The order of business at the regular meetings of the Board of Managers shall be as follows :

*a.* Reading of minutes.
*b.* Communications from the President, Secretaries or Treasurer and action thereon.
*c.* Reports of committees and action thereon.
*d.* Election of members.
*e.* Nominations for membership.
*f.* Miscellaneous business.

10.—The order of business for each regular meeting of the Society shall be as follows :

*a.* Reading of the minutes of the last meeting.
*b.* Notice of the election of new members and other notices and correspondence of the Society.
*c.* The presentation of papers and their discussion.

11.—The order of business for the annual meeting shall be as follows :

*a.* The reading of the minutes of the last annual meeting.
*b.* The presentation of the annual reports of the Secretaries.
*c.* The presentation of the annual report of the Treasurer.
*d.* The selection of a committee to audit the accounts of the Treasurer.
*e.* The announcement of a posted list of the names of members who are entitled to vote for the election of officers.
*f.* The election of a President.
*g.* The election of five Vice-Presidents, in the order named in the By-Laws.
*h.* The election of a Treasurer.
*i.* The election of a Recording Secretary.
*j.* The election of a Corresponding Secretary.
*k.* The election of eight Managers.
*l.* Unfinished business.
*m.* The reading of the rough minutes of the meeting.

The election of officers shall be as follows :

In each case nominations shall be made by an informal ballot : the result of each informal ballot having been announced, the first formal ballot shall be taken. An informal ballot may be made formal by a majority vote. Each of the Vice-Presidents shall be elected to his position separately.

In the ballot for Managers, as many names may be written on the ballot as there are Managers to be elected, and those persons receiving a majority on each formal ballot shall be declared elected. If more than the number to be elected receive a majority, those receiving the greatest number of votes shall be declared chosen.

12.—It is not permitted to report the proceedings of the Society for publication, except by authority of the Board of Managers.

13.—These rules may be amended by a majority vote, notice having been given two weeks in advance.

## RULES RELATING TO PUBLICATION.

ADOPTED BY THE BOARD OF MANAGERS FEBRUARY 6, 1891.

### *Form of Publication.*

SECTION 1. The National Geographic Society will continue to publish a serial entitled *The National Geographic Magazine.*

SEC. 2. This serial shall be published in covered parts or brochures, consecutively paged for each volume. The brochures shall be designated by volume numbers and limiting pages; and each shall bear a special title setting forth the contents and authorship, as well as the title of the serial and the seal and imprint of the Society, and, in addition, the precise date of publication.

SEC. 3. A brochure may consist of a single memoir or article, in which case twenty-five copies will be furnished to the author without charge, and the author may order or authorize the order of any additional number of copies; and the shorter papers, abstracts, reviews, notes and miscellaneous matter may be collected and issued as brochures uniform with those containing the memoirs.

SEC. 4. The brochures of the serial shall be arranged for gathering into volumes, each comprising the issue of a calendar year; and about the close of each year there shall be published in a brochure arranged to complete the volume a title-page, a list of contents, and an index for the corresponding volume, together with an abstract of the proceedings of the Society and lists of officers and members for the year, and a copy of the by-laws and rules governing the Society.

### *Matter of Publication.*

SEC. 5. The matter published in the National Geographic Magazine, may comprise: (1) original communications prepared by members or guests of the National Geographic Society presented at meetings by title or otherwise; (2) original communications or memoirs prepared for the Magazine either by members or non-members, whether presented before the Society or not; (3) translations or abstracts of important foreign publications

relating to geography, reviews of geographic works, items of geographic intelligence, etc.; (4) abstracts of papers read and discussions made before the Society, prepared or revised by authors; (5) administrative records of the Society, including condensed minutes of meetings prepared by the secretaries; (6) lists of members, by-laws and rules, resolutions of permanent character, etc.; and (7) title pages, lists of contents and indexes for each volume.

SEC. 6. Matter designed for publication in the National Geographic Magazine may be transmitted to the Committee on Publications either direct or through the secretaries or other officers of the Society: soon as may be thereafter the Committee shall decide on the desirability and expediency of publication, or refer the matter to the Board of Managers for decision; if the matter is accepted it shall be published soon as practicable; if rejected it shall be returned to the author. Communications from non-members and translated memoirs shall be published only upon unanimous vote of the Committee on Publications or by specific authority from the Board of Managers. The Committee on Publications or the Board of Managers may refer any communication to special committees for examination.

SEC. 7. Matter offered for publication in the National Geographic Magazine becomes thereby the property of the National Geographic Society and shall not be published elsewhere prior to publication in the Magazine except by consent of the Society.

SEC. 8. Matter accepted for publication in the National Geographic Magazine shall be either printed and issued soon as possible as a memoir-brochure or reserved for the next brochure of miscellaneous contents (or magazine-brochure) at the option of the Committee on Publications. Proofs of letter-press and illustrations shall be submitted to authors or persons designated by authors whenever practicable; but printing shall not be delayed more that one week by reason of absence or incapacity of authors.

### *Manner of Publication.*

SEC. 9. The text of each brochure of the National Geographic Magazine shall begin under its proper title on an odd-numbered page bearing at its head the title of the serial, the volume, the limiting pages, and the date of publication; each such brochure shall be accompanied by the illustrations pertaining to it, the

plates consecutively numbered for the volume ; and each brochure may contain a synoptic list of contents prepared by the author and, at the option of the Committee on Publications, an alphabetic index, provided the same be prepared by the author. Each brochure shall be enclosed in a cover conforming nearly as may be to the present covers of the serial, bearing at the head of its title-page the title of the serial, the volume, the limiting pages, the date of publication, and, below, the seal and imprint of the Society ; other cover pages may bear a list of the publications of the Society; but nothing else of bibliographic or other permanent value shall be printed on the covers unless the same be printed also in the body of the volume to which the brochure belongs.

SEC. 10. The author of each memoir shall receive twenty-five copies without charge and shall be authorized to order, through the committee on Publications, any edition of exactly similar brochures in exactly similar covers to be printed as author's separates at cost of paper and press work ; but no author's separates of the memoir-brochures shall be issued except in this regular form.

SEC. 11. At least two magazine-brochures may be published during each year, the first about the close of the meeting season of the Society, and the second about the close of the calendar year.

SEC. 12. Authors of papers in the magazine-brochures shall have the privilege of ordering, through the Committee on Publications, at their own cost, any number of separate copies, provided these separates bear the original pagination and a printed reference to the serial and volume from which they are extracted.

SEC. 13. About the end of each year a volume-title-page, general lists of contents and illustrations of the volume, lists of officers and members of the Society, the by-laws and rules, an abstract of the proceedings for the year, and a general index to the volume shall be printed and issued as a separate brochure. All of this matter except the index shall be arranged for binding at the beginning of the volume under a distinct Roman pagination ; but the index shall take the regular Arabic pagination at the end of the volume. The title-page shall bear the name of the Committee on Publications ; and the obverse shall bear the imprimatur of the Board of Managers and the printer's card.

SEC. 14. The bottom of each signature and of each initial

page shall bear a signature mark giving an abbreviated title of the serial, the volume and the year; and every page shall be numbered, the initial and sub-title pages at the bottom.

SEC. 15. The page-head titles shall be: on even-numbered pages, name of author and catch title of paper; on odd-numbered pages, catch title of contents of page.

SEC. 16. All brochures shall be trimmed at top, side and bottom.

SEC. 17. The typography, paper and general make up shall conform, except as herein otherwise specified, nearly as may be to the National Geographic Magazine as heretofore published.

SEC. 18. The date of publication of each brochure shall be that upon which the edition is delivered to the Committee on Publications.

SEC. 19. The brochures shall be distributed immediately by the Committee on Publications to members of the Society, subscribers, and exchanges from a list furnished by the Secretaries; and the undistributed copies of each edition shall be turned over to the Secretaries.

SEC. 20. The regular edition shall be seven hundred and fifty copies for the Society, and twenty-five copies for authors.

SEC. 21. The Committee on Publications shall keep a record of all matter published wholly or in part under the auspices of the Society whether the same be author's editions of the memoir-brochures, author's extracts from the magazine-brochures, or any other matter printed from type originally composed for the Magazine.

SEC. 22. The Magazine shall be mailed free to members of the Society not in arrears for dues more than six months, and also to exchanges, and for an annual price of three dollars to regular subscribers. The separate brochures may be sold, to the number of not more than ten to each individual, at an advance on cost of 25 per cent. to members and 75 per cent. to non-members of the Society; and either separate brochures or complete volumes may be sold to dealers at the usual discount for matter of the same class.

SEC. 23. The Committee on Publications may introduce at discretion advertisements of proper character, on pages provided for the purpose not taking the regular pagination of the Magazine, at the usual rates for such service.

# OFFICERS OF THE SOCIETY.

1891.

*President.*

GARDINER G. HUBBARD.

*Vice-Presidents.*

HERBERT G. OGDEN.
EVERETT HAYDEN.
A. W. GREELY.
C. HART MERRIAM.
HENRY GANNETT.

*Treasurer.*

CHARLES J. BELL.

*Secretaries.*

MARCUS BAKER.
C. A. KENASTON.

*Managers.*

ROGERS BIRNIE, JR.
G. K. GILBERT.
G. BROWN GOODE.
WILLARD D. JOHNSON.
W J McGEE.
T. C. MENDENHALL.
W. B. POWELL.
B. H. WARDER.

# MEMBERS OF THE SOCIETY.

MARCH 25, 1891.

*a*, original members.
*c*, corresponding members.
*l*, life members.
* Deceased.
In cases where no city is given in the address, Washington, D. C., is to be understood.

ABBE, PROF. CLEVELAND, *a*, *l*,
Army Signal Office.

ABERT, S. THAYER (Silvanus Thayer),
1108 G Street.

ACKERMAN, ENS. A. A. (Albert Ammerman), U. S. N., *c*,
Navy Department.

ACKLEY, LIEUT. COMDR. S. M. (Seth Mitchell), U. S. N.,
Coast and Geodetic Survey.

ADDISON, A. D. (Arthur D———)
Metropolitan Club.

AHERN, LIEUT. GEORGE P. (George Patrick), U. S. A., *c*,
Fort Shaw, Mont.

AHERN, JEREMIAH,
Geological Survey.

AINSWORTH, J. T. (Judah Throop),
Geological Survey.

ALLEN, DR. J. A. (Joel Asaph),
American Museum Natural History, New York, N. Y.

ALTON, EDMUND,
Wormley's Hotel.

APLIN, S. A., JR. (Stephen Arnold),
Geological Survey.

ASPINWALL, REV. J. A. (John Abel),
17 Dupont Circle.

ATKINSON, W. R. (William Russum), *a*,
Geological Survey.

AYRES, MISS S. C. (Susan Caroline), *a*,
502 A Street SE.

BABB, CYRUS C. (Cyrus Cates),
Geological Survey.

BAILEY, WILLIAM E. (William E———), *c*,
Seattle, Wash.

BAKER, DR. FRANK, *a*,
Smithsonian Institution.

BAKER, MARCUS, *a*,
Geological Survey.

BALDWIN, H. L., JR. (Harry Lewis), *a*,
Geological Survey.

BARCLAY, A. C. (Alexander Campbell),
Geological Survey.

BARKER, COMDR. A. S. (Albert Smith), U. S. N.,
Navy Department.

BARNARD, E. C. (Edward Chester), *a*,
Geological Survey.

BARNES, CHARLES A. (Charles Adams), *c*,
P. O. Box 1198, Seattle, Wash.

BARROLL, LIEUT. HENRY H. (Henry Harris), U. S. N., *c*,
Navy Department.

BARTLE, R. F. (Rudolph Francis),
947 Virginia Avenue SW.

BARTLETT, COMDR. J. R. (John Russell), U. S. N., *a*,
Providence, R. I.

BARTLETT, P. V. S. (Pliny Van Syckle),
Geological Survey.

BASS, D. W. (Daniel Waldo), *c*,
15–17 Starr-Boyd Building, Seattle, Wash.

BASSETT, C. C. (Charles Chester), *a*,
Geological Survey.

BATCHELDER, C. F. (Charles Foster), *c*,
7 Kirkland Street, Cambridge, Mass.

BAUER, LOUIS A. (Louis Agricola),
Coast and Geodetic Survey.

BAUSCH, PAUL,
War Department.

BAXTER, DAVID N. (David N———), *c*,
Seattle, Wash.

BELL, A. GRAHAM (Alexander Graham), *a*,
1336 Nineteenth Street.

BELL, A. MELVILLE, (Alexander Melville),
1525 Thirty-fifth Street.

BELL, C. J. (Charles James), *a*,
1437 Pennsylvania Avenue.

BENNETT, ASST. ENG. F. M. (Frank Marion), U. S. N.,
Navy Department.

BERNADOU, ENS. J. B. (Jean Baptiste), U. S. N., *c*,
Navy Department.

BIEN, JULIUS, *a*,
P. O. Box 3557, New York, N. Y.

BIEN, MORRIS, *a*,
Geological Survey.

BIGELOW, PROF. FRANK H. (Frank Hagar),
Nautical Almanac Office.

BIRCH, CHARLES E. (Charles Edwards),
Hydrographic Office.

BIRNIE, CAPT. R., JR. (Rogers), U. S. A., *a*,
Ordnance Office.

BLAIR, H. B. (Herbert Buxton), *a*,
Geological Survey.

BLODGETT, JAMES H. (James Harvey), *a*,
Census Office.

BODFISH, SUMNER H. (Sumner Homer), *a*,
58 B Street NE.

BOURSIN, HENRY,
Douglas City, Alaska.

*BOUTELLE, CAPT. C. O. (Charles Otis), *a*.

BOWERS, DR. STEPHEN, *c*,
Ventura, Cal.

BRECKINRIDGE, GEN. J. C. (Joseph Cabell), U. S. A.,
War Department.

BREWER, H. G. (Harrison Gaston), *a*,
Hydrographic Office.

BRITTON, A. T. (Alexander Thompson),
1419 G Street.

BUCKLEY, MISS M. L. (Margaret Lamiea),
Bureau of Pensions.

BURNETT, CHARLES A. (Charles Albert), *c*,
620 Burke Building, Seattle, Wash.

BURTON, PROF. A. E. (Alfred Edgar), *a*,
Massachusetts Institute of Technology, Boston, Mass.

CAMPBELL, M. R. (Marius Robison),
Geological Survey.

CANTWELL, LIEUT. J. C. (John Cassin), U. S. R. M., *c*,
1818 Sacramento Street, San Francisco, Cal.

CARPENTER, H. W. (Henry Wilson),
Geological Survey.

*Carpenter, Z. T. (Zachary Taylor), *a*,

Chamberlin, Prof. T. C. (Thomas Chrowder), *c*,
University of Wisconsin, Madison, Wis.

Chapin, Dr. J. H. (James Henry),
Meriden, Conn.

Chapman, R. H. (Robert Hollister), *a*,
Geological Survey.

Chatard, Dr. Thomas M. (Thomas Marean), *a*,
Geological Survey.

Chenery, Lieut. Comdr. Leonard, U. S. N., *c*,
University Club, New York, N. Y.

Chester, Comdr. C. M. (Colby Mitchel), U. S. N., *c*,
Navy Department.

Christie, James H. (James H———), *c*,
Olga, Wash.

Christie, P. H. (Peter Harrison),
Geological Survey.

Clark, A. Howard (Alonzo Howard),
National Museum.

Clark, E. B. (Elias Buckner), *a*,
Geological Survey.

Clark, Dr. William B. (William Bullock), *c*,
Johns Hopkins University, Baltimore, Md.

Clover, Lieut. Richardson, U. S. N.,
Hydrographic Office.

Colonna, B. A. (Benjamin Azariah),
Coast and Geodetic Survey.

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| Total, | 399 |

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